

Grade 8 Math M-8.1	KAS Standard: Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	Accommodations and Supports (Should align with IEP)
KAS-KAAP Content Assessment Standard: Compare the slope of the graph in two different proportional relationships.		
What does the student need to know to begin? (pre-requisite skills) content specific vocabulary (compare, relationship, proportion, slope), graphing equations and knowing that a graph is the visual representation of a math equation, proportional relationships showing how one part of an equation relates to and impacts another part, know direction words and greater/less than, understand negative and positive numbers, how to use a number line.		
What will the student be able to do? (student outcomes) When given a graph with two equations, the student will be able to compare the slopes.		
How will you task analyze the skill?		
How will you teach this? (SDI, strategies) smart board, manipulatives (physical and virtual), visual strategies and representations 3nlvn.usu.edu (virtual manipulatives), internet4classrooms.com, questioning techniques in instruction, chart maker, attainment company's "Teaching to Standards: Math" curriculum, assistive technology necessary to make an intentional response, practice content standard in real life contexts, cue cards, check lists, prompts, story based lessons, kentuckymathematics.org, technologyrocksseriously.com, slope: set up steps or a ramp, also lining up people by height, proportional relationships: how does time impact distance or rate?		
What materials will be needed? calculator, graphs, number lines, graphic organizers, computer, websites, models, graph using real objects.		
What will daily checks for understanding look like? (formative assessment)		
What were the outcomes of your practice test (summative assessment)?		

Reflections (what worked well, what will you change next time)

Grade 8 Math M-8.2	KAS Standard: Solve linear equations in one variable. a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).	Accommodations and Supports (Should align with IEP)
KAS-KAAP Content Assessment Standard: Solve one variable linear equations.		

What does the student need to know to begin? (pre-requisite skills) content standard vocabulary (variable, linear equation), computation skills, calculator skills, understanding of math symbols, understanding that a letter (i.e. x, a, b) stands for a missing number, understanding the concept equality.

What will the student be able to do? (student outcomes)

How will you task analyze the skill? when given an equation with one variable, student will be able to solve the equation.

How will you teach this? (SDI, strategies) smart board, manipulatives (physical and virtual), visual strategies and representations, nlnv.usu.edu (virtual manipulatives), internet4classrooms.com, questioning techniques in instruction, chart maker, attainment company's "Teaching to Standards: Math" curriculum, assistive technology necessary to make an intentional response, practice content standard in real life contexts, cue cards, check lists, prompts, story based lessons, kentuckymathematics.org, technologyrocksseriously.com, calculator, algebra tiles, balance bar for equations activity, equations activity (what's missing? For missing addends, i.e. $4 + \underline{\quad} = 7$), teach what you do to one side you have to do to the other (to balance), use hands on equations curriculum.

What materials will be needed? balance or scale, graphic organizers, calculator, math manipulatives, cue cards, check lists, Hands on Equations curriculum, algebra tiles, ruler, number line.

What will daily checks for understanding look like? (formative assessment)

What were the outcomes of your practice test (summative assessment)?

Reflections (what worked well, what will you change next time)

Grade 8 Math M-8.3	KAS Standard: Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	Accommodations and Supports (Should align with IEP)
KAS-KAAP Content Assessment Standard: Demonstrate an understanding of congruency between two-dimensional figures.		
What does the student need to know to begin? (pre-requisite skills) content specific vocabulary (measurement, congruence, sequence, rotation, reflection, translation, similarity and dilations), understand attributes of shapes (i.e. number of sides, vertices, etc.), shape identification		
What will the student be able to do? (student outcomes) when presented with two dimensional shapes, student will be able to identify congruency using shape attributes.		

How will you task analyze the skill?

How will you teach this? (SDI, strategies) smart board, manipulatives (physical and virtual), visual strategies and representations, nlnv.usu.edu (virtual manipulatives), internet4classrooms.com, questioning techniques in instruction, chart maker, attainment company's "Teaching to Standards: Math" curriculum, assistive technology necessary to make an intentional response, practice content standard in real life contexts, cue cards, check lists, prompts, story based lessons, kentuckymathematics.org, technologyrocksseriously.com, mirrors, tangrams, geoboards, activity (sorting by similarity and difference), using a Venn Diagram to teach attributes, teach same and different, use models to compare for congruency, using an overhead or document camera to show similarities.

What materials will be needed? shape models, magazines/books, overhead/document camera, graphic organizers, tangrams, geoboards, mirror.

What will daily checks for understanding look like? (formative assessment)

What were the outcomes of your practice test (summative assessment)?

Reflections (what worked well, what will you change next time)

Grade 8 Math M-8.4	KAS Standard: Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two dimensional figures, describe a sequence that exhibits the similarity between them.	Accommodations and Supports (Should align with IEP)
KAS-KAAP Content Assessment Standard: Demonstrate understanding of similarity between two-dimensional figures.		
What does the student need to know to begin? (pre-requisite skills) content specific vocabulary (measurement, congruence, sequence, rotation, reflection, translation, similarity and dilations), understand attributes of shapes (i.e. number of sides, vertices, etc.)		
What will the student be able to do? (student outcomes)		
How will you task analyze the skill?		
How will you teach this? (SDI, strategies) smart board, manipulatives (physical and virtual), visual strategies and representations, nlvn.usu.edu (virtual manipulatives), internet4classrooms.com, questioning techniques in instruction, chart maker, attainment company's "Teaching to Standards: Math" curriculum, assistive technology necessary to make an intentional response, practice content standard in real life contexts, cue cards, check lists, prompts, story based lessons, kentuckymathematics.org,		

technologyrocksseriously.com, mirrors, tangrams, geoboards, activity (sorting by similarity and difference)

What materials will be needed?

What will daily checks for understanding look like? (formative assessment)

What were the outcomes of your practice test (summative assessment)?

Reflections (what worked well, what will you change next time)

Grade 8 Math M-8.5	KAS Standard: Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.	Accommodations and Supports (Should align with IEP)
KAS-KAAP Content Assessment Standard: Demonstrate an understanding that a function is a rule that assigns to each input exactly one output.		
What does the student need to know to begin? (pre-requisite skills) content specific vocabulary (function, input, output, ordered pairs), ability to identify patterns.		
What will the student be able to do? (student outcomes)		
How will you task analyze the skill?		
How will you teach this? (SDI, strategies) smart board, manipulatives (physical and virtual), visual strategies and representations, nlvn.usu.edu (virtual manipulatives), internet4classrooms.com, questioning techniques in instruction, chart maker, attainment company's "Teaching to Standards: Math" curriculum, assistive technology necessary to make an intentional response, practice content standard in real life contexts, cue cards, check lists, prompts, story based lessons, Kentuckymathematics.org, technologyrocksseriously.com, build an input/output machine for functions, draw a T chart for ordered pairs.		
What materials will be needed?		

What will daily checks for understanding look like? (formative assessment)

What were the outcomes of your practice test (summative assessment)?

Reflections (what worked well, what will you change next time)

Grade 8 Math M-8.6	KAS Standard: Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	Accommodations and Supports (Should align with IEP)
KAS-KAAP Content Assessment Standard: Given a volume formula, solve real-world problems involving cones, cylinders and spheres.		
What does the student need to know to begin? (pre-requisite skills) content specific vocabulary (volume, cone, cylinder, sphere), measure volume using unit cubes, identify 3-D shapes and figures, computation skills, compare and contrast 2-D and 3-D figures, calculator skills.		
What will the student be able to do? (student outcomes)		
How will you task analyze the skill?		
How will you teach this? (SDI, strategies) smart board, manipulatives (physical and virtual), visual strategies and representations, nlvn.usu.edu (virtual manipulatives), internet4classrooms.com, questioning techniques in instruction, chart maker, attainment company's "Teaching to Standards: Math" curriculum, assistive technology necessary to make an intentional response, practice content standard in real life contexts, cue cards, check lists, prompts, story based lessons, Kentuckymathematics.org, technologyrocksseriously.com, containers to compare/contrast volumes from various containers, identify examples of 3-D figures in the environment, draw examples of 3-D figures (cone, cylinder, sphere), calculator practice with cue cards.		
What materials will be needed?		
What will daily checks for understanding look like? (formative assessment)		
What were the outcomes of your practice test (summative assessment)?		

Reflections (what worked well, what will you change next time)